

## EFFECTIVENESS OF COMMUNITY BASED HEALTH AWARENESS PROGRAMME REGARDING MENSTRUAL HYGIENE AMONG ADOLESCENT GIRLS IN SELECTED RURAL SCHOOL AT TRICHY, TAMILNADU

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### ABSTRACT

*Menstrual hygiene is a major health issue affecting women and girls worldwide during their reproductive age group. World Bank, 2019 explicated that 500 million women lack proper access to menstrual hygiene facilities and inadequate knowledge of the menstrual cycle. The main aim of the present study was to create awareness of knowledge regarding menstrual hygiene among adolescent girls in selected rural school in Trichy, Tamil Nadu. A total of 150 respondents was selected through purposive sampling technique, a semi structure questionnaire was administered. After the pretest, community based health awareness programme was implemented. Post-test was carried out with the same questionnaire after 7 days. Descriptive and inferential statistics were used to analyze the data. During pretest 70% of their knowledge regarding menstrual hygiene was inadequate, after the awareness programme, post test results showed that 66% of them had adequate knowledge & 32% were having moderately adequate knowledge. Findings from this study insisted the importance of conducting awareness programmes, was effective in enhancing knowledge of adolescents on menstrual hygiene*

**KEYWORDS:** Menstrual Hygiene, Effectiveness, Community Based Health Awareness Programme, Adolescent Girls.

Original Article

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### INTRODUCTION

Adolescence word is derived from Latin word, the infinitive of adolescere, it means 'grow into adulthood from childhood. During this time, puberty is activated by hormones that leads to growth spurts, the commencement of menstrual period occurs in the late stage of puberty among girls.<sup>[1]</sup> Adolescent girls constitute 1/5<sup>th</sup> of the total population in the world.<sup>[2]</sup> Menstruation (a period) is an incomparable experience that nature has planned for women. It is not just a small term but a major stage where a woman undergoes certain reproductive changes from the onset of menarche till menopause.<sup>[3]</sup> Adolescence girls have been recognized as a special period in their life cycle that requires precise and special attention.<sup>[5]</sup> Adolescence is the stage of physical, psychological, and reproductive development that commonly occurs during the period from puberty to permissible adulthood. The World Health Organization defines adolescence as individuals between 10 and 19 years of age.<sup>[4]</sup>

Menstrual hygiene management (MHM) is an essential aspect of hygiene for women and adolescent girls between menarche and menopause.<sup>[6]</sup> Unhealthy menstrual practices are not washing genitalia regularly, using unclean cloth, etc. Learning about menstrual hygiene forms an important part of health education among Adolescent girls to avoid future long-term ill effects of poor menstrual hygiene practices resulting in premature births, stillbirths, miscarriages, infertility problems, toxic shock syndrome, carcinoma cervix as a complication of

recurrent reproductive tract infections.<sup>[8]</sup>

Research evidence specified that there is a huge information gap was observed among rural adolescents on the physiology of menstruation and menstrual hygiene, which do have an impact on the practices during menstruation<sup>[7]</sup>. Hence the researcher is interested to take up the present study to determine the effectiveness of community based health awareness Programme regarding menstrual hygiene among adolescent girls in selected rural school at Trichy.

## **PROBLEM STATEMENT**

A Study to determine the effectiveness of community based health awareness programme regarding menstrual hygiene among adolescent girls in selected rural school at Trichy.

## **Objectives**

- To assess the pre-test knowledge regarding menstrual hygiene among adolescent girls in selected rural school.
- To evaluate the effectiveness of community based health awareness programme regarding menstrual hygiene among adolescent girls in selected rural school.
- To find out the association between the knowledge scores of adolescent girls regarding menstrual hygiene with their selected demographic variable.

## **Assumptions**

- The adolescent girls will not have adequate knowledge regarding menstrual hygiene.
- The community based health awareness programme will help adolescent girls to improve their knowledge about menstrual hygiene.

## **Hypothesis**

$H_1$ - There will be a significant difference in knowledge scores regarding menstrual hygiene among adolescent girl after administering community based health awareness program at  $p < 0.05$  level of significance.

## **METHODOLOGY**

### **Research Approach**

Quantitative research approach.

### **Research Design**

The research design selected for the present study was Pre -experimental one group pre –test post-test research design

### **Variables**

#### **Independent Variables**

Independent variable was community based health awareness program.

#### **Dependent Variable**

Dependent variable was knowledge of adolescent girls regarding menstrual hygiene.

## **SETTING OF THE STUDY**

The study was conducted in a selected private higher secondary school in Irungalur Village, Manachanallur Taluk, Trichy. It is located 3 km away from SRM Trichy College of Nursing. Health services were rendered by Trichy SRM Medical College, Hospital and Research Center & Irungalur PHC. The total strength of the school was 580(both girls & boys) out of which girl students from 8<sup>th</sup> to 12<sup>th</sup> standard were 192.

## **Research Population**

Adolescent girls from 8<sup>th</sup> standard to 12<sup>th</sup> standard

## **Sampling Technique**

Non-Probability- convenient Sampling

## **Sample Size**

Sample consist 150 adolescent girls.

## **Sampling Criteria**

### **Inclusion Criteria**

- Adolescent girls who attained menarche.
- Adolescent girls studying 8th standard to 12<sup>th</sup> standard in the selected school.
- Willing to participate in the study.

### **Exclusion**

- Students on leave
- Students who have already attended awareness programme

## **DESCRIPTION OF THE RESEARCH TOOL**

The tool consists of the following sections: Section-A: Demographic variables consists of 7 items which includes age, type of family, religion, age of menarche, absorbent used during menstruation, knowledge of menstruation before the onset of menarche& source of information.

Section-B: A Semi Structured Knowledge Questionnaire on Menstrual Hygiene.Totally12 multiple choice questions were formulated in the aspect of physiological changes during menarche-4, hygienic practices during menstruation-4, preventive measures of menstrual problems-4.

**Scoring Procedure:** Total Score was 12. 1-16 score (1-50%) : considered to be inadequate knowledge, 7-9 score (51-75%): Moderately adequate knowledge, 10-12 score(76-100%) : Adequate knowledge.

## **Data Collection Procedure**

Data was collected after permission from administrative school authority and obtained consent from the study samples, followed by pretest was conducted through semi structured knowledge questionnaire. Same day community based health awareness program was conducted. It includes physiological changes during menarche, hygienic practice during

menstruation and preventive measures of menstrual problems. The samples were divided into three groups (each group 50) and sessions were conducted. Each session took around 1 hour. After implementation of the programme, there was an interactive discussion. End of the programme handouts on menstrual hygiene practices was distributed to the students for the reinforcement. Posttest was carried out on the 7<sup>th</sup> day.

### Data Analysis Procedure

The collected information was organized, tabulated. The data were analyzed and interpreted by using descriptive and inferential statistics based on data collected from adolescent girls (N = 150). The results were computed based on the objectives of the study. The analyzed data had been organized and presented in the form of tables and graphs.

## RESULTS AND DISCUSSION

### Section A: - Findings Related Socio Demographic Variables of the Participants

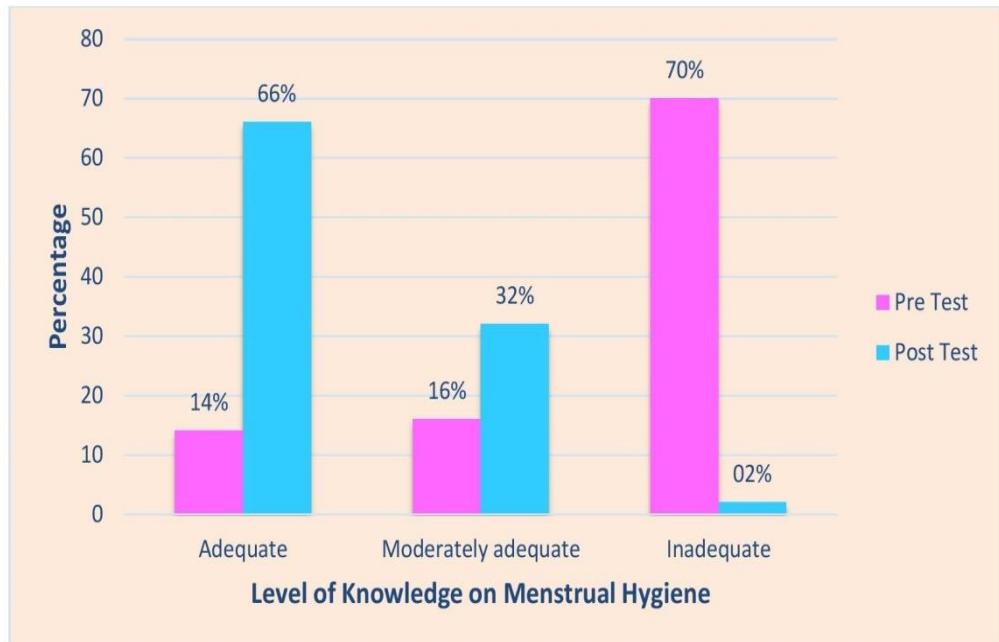
**Table 1: Background variables of participants (N = 150)**

S. No	Variables	Frequency	%
1	Age (years) a) 13 b) 14 c) 15 d) 16 e) 17	17 34 30 22 47	11% 22% 20% 14% 32%
2	Types of family a) Nuclear family b) Joint family	124 26	83% 26%
3	Religion a) Hindu b) Christian c) Muslim	104 44 02	69% 30% 01%
4	Age of Menarche(years) a) 10-11 b) 12-13 c) 14-15 d) >16	30 108 07 05	20% 72% 05% 03%
5.	Absorbent used during menstruation. a) Sanitary pad b) cloth	122 28	81% 19%
6	knowledge on menstruation before the onset of menarche a) yes b) no	42 108	28% 72%
7	Source of information a) Friends b) Teachers c) Siblings d) Social Media	60 18 39 33	40% 12% 26% 22%

Table -1 indicated that in regard to age, the majority (46%) of them were in the age group of 15 -17 years. Most of the (83%) participants belong to nuclear families. 69% of them following Hindu religion. 72% of the adolescents' attained menarche between the ages of 13-14 years. 81% of them were` using sanitary pads during menstruation. 23% of them reported having learnt regarding menstruation before menarche, most of them (72%) felt unprepared to face the initiation of menstruation. In regard to the source of information highlighted that 40% from the friend

### **Section-B: Findings Related to Effectiveness of Community Based Health Awareness Program**

Figure -1 shows that during pretest 70% of them have inadequate knowledge and 16% had moderately adequate knowledge but during posttest 66% of them were having adequate and (32%)moderately adequate knowledge



**Figure 1:** frequency & percentage distribution of pre & posttest level of knowledge on Menstrual Hygiene (N = 150).

### **Section-C: Findings Related to the Effectiveness of Community Based Health Awareness Program**

**Table 2: Mean Score on Knowledge Regarding Menstrual Hygiene (N=150)**

Test	Mean	SD	Mean Difference	Paired t-value & p value
Pre test	5.12	1.47	-4.94	$t = 23.213$ $p = 0.001^{***}$
Post test	10.06	1.32		

Table 2 depicted that pretest level of knowledge among adolescents on Menstrual Hygiene improved significantly from 5.12 mean score to 10.06 scores during the posttest after intervention. Which was highly significant at  $p < 0.001$  level

**Table 3: Association between knowledge of Adolescent Regarding Menstrual Hygiene with their Selected Background Variables. N= 150**

Back ground variables	n	Pre test		Post test		Knowledge gain score		One way ANOVA F – test/ t – test
		Mean	SD	Mean	SD	Mean	SD	
1.Age(Years)								
a.13	17	4.81	1.43	9.23	1.49	4.42	2.21	F = 3.32 p = 0.05* (s)
b.14	34	5.52	1.48	10.51	.93	4.99	2.02	
c.15	30	5.13	1.46	11.06	1.45	5.93	2.36	
d.16	22	5.06	.96	10.04	1.06	4.48	2.41	
e.17	47	5.83	1.40	11.41	1.41	5.95	2.16	
2.Religion								
a. Hindu	104	4.95	1.66	9.98	1.48	5.03	2.29	F= 1.96 p=0.10 (NS)
b. Christian	44	5.77	.93	10.23	1.42	4.46	1.94	
c. Muslim	02	4.71	1.11	10.86	.69	6.14	1.35	
3.Type of family								
a. Nuclear family	124	5.15	1.40	9.83	1.40	4.67	2.32	F= 0.80 p=0.45 (NS)
b. Joint family	26	5.00	1.58	10.24	1.19	5.24	1.86	
4.Age of menarche								
a.10-11	30	5.22	1.49	10.19	1.41	4.97	2.20	F= 0.38 p=0.76 (NS)
b.12-13	108	4.92	1.00	10.25	1.29	5.33	1.30	
c.14-15	07	4.93	1.64	9.89	1.20	4.93	2.29	
d.>16 years	05	5.44	1.42	9.78	1.48	4.33	2.06	
5.Absorbent used during menstruation								
a. sanitary pad	122	5.19	1.73	11.03	1.34	5.84	2.28	F= 4.08 p=0.02* (S)
b. cloth	28	5.59	.71	10.47	1.11	4.88	1.67	
6.knowledge on menstruation before the onset of menarche								
a. Yes	42	5.00	1.38	10.71	1.23	5.71	1.82	t= 3.95 p=0.02* (S)
b. No	108	5.16	1.50	9.41	1.36	4.25	2.23	
7.source of information								
a. Friends	60	4.82	1.51	9.91	1.31	5.09	2.08	F= 3.08 p=0.03* (S)
b. teachers	18	5.16	1.14	10.48	1.33	5.32	1.86	
c. siblings	39	5.23	1.60	9.73	1.12	4.50	2.11	
d. social media	33	6.17	1.72	10.34	1.86	4.17	3.06	

Table 3 implicit that late adolescents having better knowledge and practice of using sanitary pads during menstruation. Knowledge of menstruation before the onset of menarche was significantly associated in increasing the knowledge level of adolescents. Friends and social media significantly influence their knowledge on menstrual hygiene.

## DISCUSSIONS

The present study findings on distribution of background variables of participants showed that in regard to age, the majority (46%) of them were in the age group of 15 -17 years. 72% of the adolescents' attained menarche between the ages of 13-14 years. 81% of them were` using sanitary pads during menstruation. 23% of them reported having learnt regarding menstruation before menarche, most of them (72%) felt unprepared to face the initiation of menstruation. In regard to the source of information highlighted that 40% from the friends. These results were consistent with the study conducted by Akhil R Nair et al, in 2019 to assess the knowledge regarding the practices of menstrual hygiene and reproductive tract infections among school going adolescents. Then the majority of the girls (71%) ages between 15 and 17 years. Only 38% of the girls were aware of menstruation before menarche. The main source of information about menstruation and menstrual hygiene was their mother in about 54% of girls. 76% of the girls used sanitary pads during menstruation.<sup>(9)</sup> Also, it was supported by Madhumitha. M et al. (2019) she carried out the study to assess the knowledge, attitude and practice of menstrual hygiene among adolescent school going girls in Tamilnadu. The study revealed that out of 148 girls only 3 girls were aware of menstruation prior to attainment of menarche.<sup>(10)</sup> It was found that there is a difference in their awareness level on menstruation, it may be due to their place of the habitant.

In the existing study frequency &the percentage distribution of pre & posttest levels of knowledge on Menstrual Hygiene showed that during pretest 70% of them have inadequate knowledge and 16% had moderate adequate knowledge, but during post test 66% of them were having adequate and (32%) moderately adequate knowledge. The present study was in line to a study by Pooja Chauhan et al, (2018), the study revealed that the knowledge about menstrual cycle & hygiene is very poor.<sup>(11)</sup>Lack of knowledge of menstrual hygiene is due to sociocultural barriers in which they grow up. Compost scores of adolescents' knowledge regarding Menstrual Hygiene showed that it was significantly improved from 5.12 mean score to 10.06 score with the t- value of 23.213.After implementation of community based health awareness program. It was highly significant at  $p < 0.001$  level. This result was similar to the study conducted by Namitaetal, in 2017to assess the knowledge regarding practices of menstrual hygiene and RTI among high and higher secondary school girls: an educational interventional study. The study revealed that the awareness level found statistically significant after the implementation of intervention.<sup>(12)</sup>Hence the present study hypothesis there will be a significant difference in knowledge scores regarding menstrual hygiene among adolescent girls after administering community based health awareness program was accepted.

## **CONCLUSIONS**

The present study showed that there is a need for accurate information on menstrual hygiene hence investigator created the awareness on the physiology of menstruation and menstrual hygiene, to bring them out of traditional myths and misconceptions. After implementing community based awareness programme, adolescent knowledge was significantly increased. Creating timely awareness can prevent adolescents suffering from RTI related complications in future life

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